

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-19. (Canceled)
20. (Previously Presented) The tire defined in claim 32, wherein the angle of the sipes in the first and second ribs is 7°.
21. (Previously Presented) The tire defined in claim 32, wherein the sipes have a depth of between 20% and 100% of the height of the tread blocks.
22. (Previously Presented) The tire defined in claim 32, wherein the sipes are substantially perpendicular to the mid-circumferential plane of the tire.
23. (Previously Presented) The tire defined in claim 32, wherein the sipes are formed at an angle with respect to the mid-circumferential plane of the tire.
24. (Previously Presented) The tire defined in claim 32, wherein the sipes each have a width of between 0.015 inches and 0.06 inches.
25. (Previously Presented) The tire defined in claim 24, wherein the sipes have a width of approximately 0.03 inches.
26. (Previously Presented) The tire defined in claim 32, wherein the sipes have a zig-zag pattern.
27. (Previously Presented) The tire defined in claim 32, wherein the sipes are formed in opposed shoulder ribs of the tire.
28. (Previously Presented) The tire defined in claim 32, wherein the sipes are formed in opposed intermediate ribs of the tire.
29. (Previously Presented) The tire defined in claim 32, wherein the sipes extend partially across the lateral width of the tread blocks.

30. (Previously Presented) The tire defined in claim 32, wherein certain of the laterally extending grooves have a generally V-shaped configuration.

31. (Canceled)

32. (Currently Amended) A pneumatic tire having a circumferentially extending tread pattern with at least first and second circumferentially extending ribs, said ribs being located on opposite sides of a mid-circumferential plane of said tire;

each rib containing a plurality of symmetrical tread blocks separated by laterally extending grooves, said tread blocks having leading and trailing edges symmetrical with respect to a first radial plane passing through a midpoint of said tread blocks and through an axis of rotation of the tire;

an angled sipe formed in each of the tread blocks, each sipe extending for a sipe lateral width and a radial sipe depth at a constant sipe angle of inclination between 2° and 15° with respect to a second radial plane passing through an outermost tread surface of the tread block and adjacent to the sipe and through an axis of rotation of the tire,

wherein ~~said each sipes within said rib tread blocks~~ on a first side of the mid-circumferential plane extends at a first sipe angle of inclination with respect to ~~on a first side of said second radial plane~~ for the sipe lateral width and the radial sipe depth,

wherein ~~said each sipes within said rib tread blocks~~ on a second side of the mid-circumferential plane extends at a second angle of inclination with respect to ~~on a second side of said second radial plane~~ that is equal to and opposite the first sipe angle for the sipe lateral width and the radial sipe depth, and

wherein said tread blocks on opposite sides of the mid-circumferential plane create a force on the tire during load bearing rotation of the tire against a surface, said force including forces that extend in opposite directions on opposite sides of the mid-

circumferential plane creating an overall moment on the tire to affect tire residual adjustingaligning torque.

33. (Previously Presented) The tire defined in claim 32, wherein the first and second ribs are located equidistant on opposite sides of the mid-circumferential plane.

34-35. (Canceled)

36. (Currently Amended) A pneumatic tire, comprising:

a circumferentially extending tread pattern with at least first and second circumferentially extending ribs, said ribs being located on opposite sides of a mid-circumferential plane of said tire;

a plurality of tread blocks within each of the at least first and second circumferentially extending ribs, said tread blocks separated by laterally extending grooves;

an angled sipe formed in each of the tread blocks, each angled sipe extending for a sipe lateral width and a radial sipe depth at a sipe angle of inclination between 2° and 15° with respect to a second radial plane passing through an outermost tread surface of the tread block and adjacent to the angled sipe and through an axis of rotation of the tire, ~~the sipe angle of inclination not passing through zero for the sipe lateral width of the sipe,~~

wherein said angled sipes within said rib tread blocks on a first side of the mid-circumferential plane extend at a first sipe angle of inclination with respect to said second radial plane for the sipe lateral width and the radial sipe depth ~~on a first side of said second radial plane,~~

wherein said angled sipes within said rib tread blocks on a second side of the mid-circumferential plane extend at a second sipe angle of inclination with respect to said second radial plane that is equal to and opposite the first sipe angle for the sipe lateral width and the radial sipe depth with respect to ~~on a second side of said second radial plane,~~ and

wherein said the first and second sipe angles of inclination are set during a molding process of the tire, by inserting angled sipe blades in a tire tread mold, thereby allowing the residual aligning torque of the tire to be altered based upon the first and second sipe angles of inclination selected without changing the mold from which the tire tread is formed. ~~is independent of a shape of the tread block or a shape of said laterally extending grooves.~~

37. (New) A method of manufacturing a pneumatic tire, the method comprising:

selecting an existing tire tread mold with a tread pattern that includes:

a circumferentially extending tread pattern with at least first and second circumferentially extending ribs, said ribs being located on opposite sides of a mid-circumferential plane of said tire; and

a plurality of tread blocks within each of the at least first and second circumferentially extending ribs, said tread blocks separated by laterally extending grooves;

building a finite element model of the pneumatic tire with the tire tread that corresponds to the selected mold, wherein the modeled pneumatic tire includes:

an angled sipe formed in each of the tread blocks, each angled sipe extending for a sipe lateral width and a radial sipe depth at a sipe angle of inclination between 2° and 15° with respect to a second radial plane passing through an outermost tread surface of the tread block and adjacent to the angled sipe and through an axis of rotation of the modeled tire,

wherein said angled sipes within said rib tread blocks on a first side of the mid-circumferential plane extend at a first sipe angle of inclination with respect to said second radial plane for the sipe lateral width and the radial sipe depth, and

wherein said angled sipes within said rib tread blocks on a second side of the mid-circumferential plane extend at a second sipe angle of inclination with respect to

said second radial plane that is equal to and opposite the first sipe angle for the sipe lateral width and the radial sipe depth,

performing a plurality of computer simulations based upon the a finite element model wherein said first sipe angle of inclination and said second sipe angle of inclination are varied until a simulated tire with a desired residual aligning torque is achieved;

inserting angled sipe blades into the selected tire tread mold that correspond to a first sipe angle of inclination and a second sipe angle determined based upon the simulation to result in the desired residual aligning torque; and

casting a tread upon the pneumatic tire using the selected mold and the inserted angled sipe blades, thereby producing the pneumatic tire with a desired residual aligning torque without permanently altering the mold from which the tire tread is formed.